

REMARKS

The Office Action of May 27, 2009 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Claims 1-19 were pending prior to the instant amendment. By this amendment, claims 1 to 8 are amended. Consequently, claims 1-19 are currently pending in the instant application with claims 1 to 8 being independent.

In the Office Action, claims 1 to 8 are objected to because of informalities. In response, Applicants have amended claims 1 to 8 as shown above to address each cited informality. Thus, Applicants respectfully request that the objections be withdrawn.

Additionally, claims 1-8, 9-10, 16 and 18-19¹ stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,046,547 to Nishio et al. (Nishio). Nishio, however, fails to render the claimed invention unpatentable. Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways. For example, independent claims 1 to 8, as amended, each recite a combination that includes, among other things:

wherein a surface of the insulating layer and the first conductive layer is planarized and a uniform surface.

At the very least, Nishio fails to disclose or suggest any of these exemplary features recited in the independent claims 1 to 8.

¹ It is noted on page 12 of the Office Action, the Examiner apparently references Hashimoto instead of Nishio to reject claims 18 and 19 in error. Clarification is respectfully requested in the next Office Action.

To establish anticipation under 35 U.S.C. § 102(b), the Examiner must show that each and every feature recited in these claims is either explicitly disclosed or “necessarily present” in a single prior art reference, such as within the four corners of the Nishio reference. *See* M.P.E.P. § 2131(7th ed. 1998); *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999); *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991). To support a conclusion of anticipation, the Examiner must specifically identify “substantial evidence” setting forth why and how the single prior art reference anticipates each and every feature recited in the claims. *See In re Mullin*, 481 F.2d 1333, 1336-37 (CCPA 1973) (An Examiner’s bare assertion that claims were obviously anticipated by a reference did not inform the Applicant as to why the claims lacked novelty); *Dickinson v. Zurko*, 527, U.S. 150 (1999) (The U.S. Patent Office’s findings of fact must be reviewed by the substantial evidence standard).

Viewed against this backdrop, each of the Examiner’s factual conclusions must be supported by “substantial evidence” in the documentary record. See *In re Lee*, 61 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 2002). The Examiner has the burden of documenting all findings of fact necessary to support a conclusion of anticipation or obviousness “less to ‘haze of so-called expertise’ acquire insulation from accountability.” *Id.* To satisfy this burden, the Examiner must specifically identify where support is found within the prior art to meet the requirements of 35 U.S.C. §§ 102(b). In this case, however, the Examiner cannot satisfy his burden of demonstrating how Nishio, taken alone or in combination with any other prior art reference, can either render obvious each and every one of the limitations present in independent claims 1 to 8 as required by the Manual of Patent Examining Procedure (“MPEP”) and Federal Circuit jurisprudence.

The Examiner asserts that Nishio “discloses in figures 1-10, a thin film transistor comprising: an insulating layer 505 having a first opening (Fig. 9C); a first conductive layer 501 b fitted in **the opening** (Fig. 9C); a second conductive layer (lower portions of 501 a in layer 504) on and in contact with the first insulating layer 505 and the first conductive layer 501a; wherein **the first conductive** 501 a is thicker than the second conductive layer in a vertical direction (Fig. 9C), and wherein the surface of the insulating layer 505 and the first conductive layer is planarized (Fig. 9C).”

However, as shown above, Applicants have amended claims 1 to 8 to recite, *inter alia*, the features of wherein a surface of the insulating layer and the first conductive layer is planarized and a uniform surface. That is, it Applicants contend that Nishio fails to teach or disclose the features of a surface of the insulating layer and the first conductive layer is planarized and a uniform surface, as presently claimed.

For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present (M.P.E.P. 706.02). Since each and every element, as set forth in the claims are not found either expressly or inherently described as required by the M.P.E.P., Nishio cannot be said to anticipate the invention as claimed. Hence, withdrawal of the rejection is respectfully requested.

Further, claims 11 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio applied to claims 1 to 8 above, and in view of U.S. Pat. Pub. 2002/0132396 A1 to Yamazaki et al. (Yamazaki); claims 13 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishio as applied to claims 1 to 8 above; and claims 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishio as applied to claims 1 to

8 above, and in further view of U.S. Pat. Pub. 2001/0013913 A1 to Young (Young). These rejections are traversed as discussed in detail below.

Nishio, taken alone or in combination with Yamazaki and/or Young, however, fails to render the claimed invention unpatentable. Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways as discussed above. At the very least, the applied references, whether taken alone or in combination, fail to disclose or suggest the exemplary features recited in independent claims 1 to 8.

The Examiner attempts to remedy the deficiencies of Nishio by turning to Yamazaki. Yamazaki discusses the use of copper wiring for electric connection. However, Yamazaki fails to disclose or suggest the features of a surface of the insulating layer and the first conductive layer is planarized and a uniform surface, as recited in claims 1 to 8.

The Examiner attempts further to remedy the deficiencies of Nishio by turning to Young. Young discusses in Fig. 4 amorphous semiconductor gate structures. Therefore, the Examiner asserts that the use of amorphous semiconductor material as TFT active regions would have been obvious. However, Young does not disclose or suggest the features of a surface of the insulating layer and the first conductive layer is planarized and a uniform surface, as recited in claims 1 to 8.

In accordance with the M.P.E.P. § 2143.03, to establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 196 (CCPA 1970). Therefore, it is respectfully submitted that neither Nishio, Yamazaki nor Young, taken alone or in any proper

combination, discloses or suggests the subject matter as recited in claims 1 to 8. Hence, withdrawal of the rejection is respectfully requested.

Each of the dependent claims depend from one of independent claims 1, 2, 3, 4, 5, 6, 7 or 8 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claims 1 to 8.

In addition, each of the dependent claims also recite combinations that are separately patentable.

In view of the foregoing remarks, this claimed invention, as amended, is not anticipated or rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this response, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

In discussing the specification, claims, and drawings in this response, it is to be understood that Applicants in no way intend to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Should the Examiner believe that a telephone conference would expedite issuance of the application, the Examiner is respectfully invited to telephone the undersigned agent at (202) 585-8100.

Respectfully submitted,

/Sean A. Pryor, Reg. #48103/

Sean A. Pryor

NIXON PEABODY LLP
CUSTOMER NO.: 22204
401 9th Street, N.W., Suite 900
Washington, DC 20004
Tel: 202-585-8000
Fax: 202-585-8080